

Claims

1. A method for packaging a flexible hydrophilic intraocular lens (1), in which:
 - 5 - the lens (1) is placed on an injection support (4) including an implantation end (5) through which the lens (1) can be slid and ejected for intraocular implantation, said injection support (4) being adapted to receive and carry the lens (1) and to be associated with an injection device (14) including a thruster piston (41) able to push the lens (1) on the injection support (4) towards the implantation end (5),
 - 10 - the lens (1) and the injection support (4) are placed in a packaging enclosing a volume of liquid solution for conserving the lens (1) which bathes the lens and keeps it hydrated,
 - 15 wherein:
 - an injection support (4) adapted to receive and carry the lens (1) flat and to carry out folding of the lens (1) prior to ejection of the latter via the implantation end (5) is used;
 - the lens (1) is placed flat on the injection support (4) and is immersed in a bath of liquid conserving solution (20, 31) contained in a liquid-tight rigid flask (19, 30) which is closed, and
 - 20 - the assembly is then steam-sterilized.
2. A method as claimed in claim 1, wherein the rigid flask (19, 30) is placed prior to sterilization in an outer packaging envelope (25, 48) compatible with steam sterilization.

3. A method as claimed in either of claims 1 and 2, wherein an injection support (4) is used which is adapted to carry out the folding by a simple translational movement imparted to the lens (1) when the latter is pushed towards the implantation end (5).
5
4. A method as claimed in any one of claims 1 to 3, wherein an injection support (4) carried removably by a stopper (17) for closing the rigid flask (19) is used.
10
5. A method as claimed in any one of claims 1 to 3, wherein an injection support (4) is used which is associated with an injection device (14) including a hollow cylindrical body (32) for receiving the thruster piston (41) adapted to slide in a sealed manner in the cylindrical body ³¹~~(32)~~, wherein the rigid flask (30) and the cylindrical body (32) are adapted to be fixed rigidly and sealingly to one another, the injection support (4) extending in the liquid conserving fluid in the rigid flask (30), but to be fixed in such a way that they can be separated from one another in order to utilize the injection device (14) to implant the lens (1).
15
20
6. A method as claimed in claim 5, wherein the rigid flask (30) and the cylindrical body (32) are fixed to one another by screwing an end (37) of the rigid flask (30) to the outer wall (34) of the cylindrical body (32) in such a way as to ensure liquid-tightness between the rigid flask (30) and the outer wall (34) of the cylindrical body.
25
30

7. A device for packaging and conserving in a sterile condition a flexible hydrophilic intraocular lens (1), comprising:
 - an injection support (4) including an implantation end (5) through which the lens (1) can be slid and ejected for intraocular implantation, said injection support (4) being adapted to receive and carry the lens (1) and to be associated with an injection device (14) including a thruster piston (41) able to push the lens (1) towards an implantation end (5) of the injection support (4);
 - a flexible hydrophilic intraocular lens (1) placed on the injection support (4);
 - a packaging enclosing at least the lens (1), the injection support (4) and a volume of liquid solution for conserving the lens which bathes the lens (1) and keeps it hydrated,
- 15 wherein:
 - the injection support (4) is adapted to receive and carry the lens (1) flat and to carry out folding of the lens (1) prior to ejection of the latter via the implantation end (5);
 - the lens (1) is carried flat on the injection support (4) and immersed in a bath of liquid conserving solution (20, 31) contained in a rigid liquid-tight flask (19, 30) which is closed, and
 - the assembly is in a sterilized condition.
- 20
- 25
- 30 8. A device as claimed in claim 7, wherein the rigid flask (19, 30) is enclosed in an outer packaging envelope (25, 48) compatible with steam sterilization.

9. A device as claimed in either of claims 7 and 8, wherein the injection support (4) is adapted to carry out the folding by a simple translational movement imparted to the lens (1) when the latter is pushed 5 towards the implantation end (5).
10. A device as claimed in any one of claims 7 to 9, wherein the injection support (4) is carried removably by a stopper (17) for closing the rigid flask (19).
11. A device as claimed in any one of claims 7 to 9, wherein the injection support (4) is associated with 10 an injection device (14) including a hollow cylindrical body (32) for receiving the thruster piston (41) adapted to slide in a sealed manner in the cylindrical body (32), and wherein the rigid flask (30) and the cylindrical body (32) are adapted 15 to be fixed rigidly and sealingly to one another, the injection support (4) extending in the liquid conserving fluid in the rigid flask (30), but to be 20 fixed in such a way that they can be separated from one another in order to utilize the injection device (14) to implant the lens (1).
- 25 12. A device as claimed in claim 11, wherein the rigid flask (30) and the cylindrical body (32) are fixed to one another by screwing an end (37) of the rigid flask (30) to the outer wall (34) of the cylindrical body (32) in such a way as to ensure liquid-tightness 30 between the rigid flask (30) and the outer wall (34) of the cylindrical body (32).

13. A device as claimed in either of claims 11 and 12, wherein it includes means (62) forming an axial stop which prevents premature extraction of the thruster piston (41) from the hollow cylindrical body (32).

5

14. A device as claimed in claim 13, wherein the hollow cylindrical body (32) is adapted to form the axial end stop (62) preventing premature extraction of the thruster piston (41) from the hollow cylindrical body (32).

10

15. A device as claimed in claim 14, wherein it includes a seal (63) adapted to be interposed between the axial end stop (62) of the hollow cylindrical body (32) and a sealing block (45) of the thruster piston (41) when in its retracted end position in the hollow cylindrical body (32).

15

16. A device as claimed in any one of claims 11 to 15, wherein it is provided with unlockable means for locking the thruster piston (41) in its retracted end position in the hollow cylindrical body (32).

20

17. A device as claimed in claim 16, wherein the thruster piston (41) includes a non-rotationally-symmetrical operating stem (46), wherein the hollow cylindrical body (32) has an axial end (72) provided with a non-rotationally-symmetrical opening (65) having a shape matching that of the operating stem (46), and wherein the operating stem (46) is so mounted as to be able to be rotated about its longitudinal axis between a locked position in which it cannot pass through the

25

30

opening (65) and an unlocked position in which it can pass through the opening (65).

18. A device as claimed in any one of claims 7 to 17,
5 wherein the injection support (4) includes an adapter bush (81) forming a receptacle (6) for the lens (1), the bush (81) being adapted to be able to carry and receive different models of lens (1, 1a, 1b, 1c), and to be mounted in a cylindrical end portion (7) of the
10 injection support (4).